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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,650	07/07/2006	Nobuhiro Tazoe	292536US2PCT	5471
22850	7590	01/19/2011	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			APICELLA, KARIE O	
			ART UNIT	PAPER NUMBER
			1726	
			NOTIFICATION DATE	DELIVERY MODE
			01/19/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/585,650	<b>Applicant(s)</b> TAZOE, NOBUHIRO	
	<b>Examiner</b> Karie O'Neill Apicella	<b>Art Unit</b> 1726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 18, 2010, has been entered.
2. Claim 10 has been amended. Claims 1-9 and 11-16 have been cancelled. Claim 17 has been added as new. Therefore, Claims 10 and 17 are pending in this office action.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reimers et al. (US 6,416,904 B1 ) in view of Fukumura et al. (US 6,027,835).

Reimers et al. discloses in Figures 1 and 2, a manufacturing method for producing a cell electrode plate used as lithium ion battery electrodes, comprising a band-like core member, called a web, made of metal foil, such as copper or aluminum

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foil (column 4, lines 45-51). Reimers et al. discloses a plurality of sheets, called segments, of electrode active material applied discontinuously on and longitudinally on, in segments, at least one of upper and lower surfaces of the core metal foil web (column 3, lines 45-52). Reimers et al. discloses the leading edges and trailing edges of the upper side segment coatings in a same plane as the upper surface of the core member are proximate to the leading edges and trailing edges of the lower side segment coatings in the same plane as the lower surface of the core member to thereby provide sheets of electrode active material on said core metal foil web (column 3, lines 52-55). Reimers et al. discloses pressing the segments with press rolls, called calendar rollers (16) or a roll press machine (column 7, lines 3-7). Reimers et al. does not disclose the step of drying and wherein a first sheet of the sheets of electrode active applied on one of the upper and lower surfaces of the core member has end positions widthwise of the core member which are different from end positions of the other sheets of electrode active material widthwise of the core member providing the sheets of electrode active material on said core member, and the axial positions of the press rolls at which the end positions of the first sheet widthwise of the core member contact are different from the axial positions of the press rolls at which the end positions of other sheets widthwise of the core member contact to thereby the sheets of electrode active material on said core member.

Fukumura et al. discloses an electrode sheet for use with a non-aqueous secondary cell using lithium as an active material, the active material or electrode depolarizing mix layer being formed on both sides of a current collector, the current

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collector preferably made of aluminum or copper foil (column 1, lines 32-36 and column 2, lines 60-67). Fukumura et al. discloses the step of applying the depolarizing mix layers to the current collector and a drying process (column 3, lines 10-22). Fukumura et al. discloses in Figures 4A-4C, an electrode depolarizing mix layer (42a) being formed on an upper surface of a current collector (41) and an electrode depolarizing mix layer (42b) being formed on a lower surface of the current collector (41). As compared to the lower electrode depolarizing mix layer (42b), the left end LT of the upper electrode depolarizing mix layer (42a) is shifted to the right (toward the center of the electrode sheet), and the right end RT thereof is shifted to the right (toward the right end of the electrode sheet). The cross sections of the electrode sheet at both ends in the longitudinal direction are in translational symmetry with each other. The lengths of the electrode depolarizing mix layers (42a) and (42b) are generally equal (column 4, lines 17-34). That is to say, the electrode active material on the upper surface of the core member has end positions widthwise which are different than end positions of the electrode active material on the lower surface widthwise of the core member. Fukumura et al. discloses that the shift amount of the electrode mix layers of an electrode sheet can be regulated by adjusting the positions of the adhered tapes which is controlled by different methods (column 4, lines 66-67 and column 5, lines 1-3). At the time of the invention it would have been obvious to one of ordinary skill in the art to place a first sheet of the sheets of electrode active material on one of the upper and lower surfaces of the core member having end portions widthwise of the core member in a different position from the other sheets of electrode active material widthwise of the core

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member, because Fukumura et al. teaches that these electrode sheets can be easily wound and coiled and form an assembly of high circularity (column 5, lines 17-22).

Also, it would have been obvious to one of ordinary skill in the art at the time of the invention that the axial positions of the press rolls at which the end positions of the first sheet widthwise of the core member contact are different from the axial positions of the press rolls at which end positions of the other sheets widthwise of the core member contact, since the press rolls making contact with the first sheet of the sheets is the press roll for the upper surface and the lower surface press roll makes contact with the other sheets located on the lower surface thereby giving the upper surface press roll and different axial position than the lower surface press roll.

***Allowable Subject Matter***

4. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the closest prior art, Reimers et al. (US 6,416,904 B1) in view of Fukumura et al. (US 6,027,835) do not teach or fairly suggest the method further comprising trimming, after the pressing, end portions of the sheets and the core member so that the sheets and the core member have common end positions widthwise of the core member.

***Response to Arguments***

6. Applicant's arguments with respect to claim 10 have been considered but are moot in view of the new ground(s) of rejection. The arguments of record are based on the claims as amended. The amended claims have been addressed in the new rejection in paragraph 3 above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karie O'Neill Apicella whose telephone number is (571) 272-8614. The examiner can normally be reached on Monday through Friday from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karie O'Neill Apicella/  
Primary Examiner  
Art Unit 1726

KOA